

AMENDMENTS TO THE CLAIMS

1. (Cancelled)

2. (Currently Amended) A The-content retrieval device for retrieving content data from a server via a communication network, according to claim 1, wherein the content data includes locational information of each of sub-content data which is linked to the content data and connection method information indicating a connection method which is suitable for each of the sub-content data, said device comprising:

a said-browser section is-operable to extract the locational information and the connection method information of each of the sub-content data by analyzing the received content data-received by said-communication-control section, and to then generate a retrieval request specifying the locational information of the sub-content data to be retrieved presently; and

a said-protocol control section is-operable to select, prior to a-suitable-connection method-for-reception of the sub-content data, a suitable connection method for the sub-content data specified by said browser section from among a plurality of connection methods by using a multi-call function, based on the connection method information extracted by said browser section; and

a communication control section operable to receive the content data specified by said browser section from the server under the connection method selected by said protocol control section;

wherein the connection method is either one of a packet switching connection method and a circuit switching connection method.

3. (Currently Amended) A The-content retrieval device for retrieving content data from a server via a communication network, according to claim 1, wherein the content data includes locational information and a file attribute of each of sub-content data which is-linked to the content data, said device comprising:

said-content-retrieval device-further-comprises a connection information management section operable to manage a connection information table which includes a

description of a suitable connection method in association with the file attribute of the content data,

~~a said-browser section is operable to extract a set of the locational information and the file attribute of each of the sub-content data by analyzing the received content data, to and hold the set as internal information, and to then generate a retrieval request specifying the locational information of the sub-content data to be retrieved presently;~~
and

~~a said-protocol control section is operable to receive, select a suitable connection method from among a plurality of connection methods by, upon reception of the retrieval request generated by said browser section, receiving the file attribute pairing with the locational information specified in the retrieval request from said browser section, and to select, prior to reception of the content data, then extract the suitable connection method pairing with the file attribute received from said browser section from said connection information management section, from among a plurality of connection methods by using a multi-call function;-~~

wherein the connection method is either one of a packet switching connection method and a circuit switching connection method.

4. (Currently Amended) A The-content retrieval device for retrieving content data from a server via a communication network, according to claim 1, wherein locational information is allocated to the-content data for indicating a storage location of the content data in the server, part of the locational information representing a feature of the content data, said device comprising:

~~said content retrieval device further comprises a connection information management section operable to manage a connection information table including which includes a description of a suitable connection method in association with the feature of the content data, and~~

a browser section operable to generate a retrieval request specifying locational information of the content data to be retrieved presently;

~~a said-protocol control section is operable to receive, select a suitable connection method from among a plurality of connection methods by, upon reception of the retrieval~~

request generated by said browser section, a receiving the suitable connection method pairing with the part of the locational information included in the retrieval request from said connection information management section, and to select, prior to reception of the content data, a suitable connection method for the content data specified by said browser section from among a plurality of connection methods by using a multi-call function based on the received suitable connection method from the connection information management section; and

a communication control section operable to receive the content data specified by said browser section from the server under the connection method selected by said protocol control section;

wherein the connection method is either one of a packet switching connection method and a circuit switching connection method.

5. (Currently Amended) A The content retrieval device for retrieving content data from a server via a communication network, according to claim 1, wherein the server is capable of separately transmitting is operable to transmit a content header including a file attribute of the content data in addition to the content data, said device comprising:

said content retrieval device further comprises a connection information management section operable to manage a connection information table which includes a description of a suitable connection method in association with the file attribute of the content data;

a said browser section is operable to generate a first retrieval request specifying locational information of the content data to be retrieved presently;

a said protocol control section is operable to generate, upon reception of the first retrieval request generated by said browser section, a second retrieval request for retrieving only a content header of the content data specified in the first retrieval request, upon reception of the first retrieval request generated by said browser section; and

a said communication control section is operable to receive the content header specified in the second retrieval request generated by said protocol control section, and wherein

said protocol control section is further is-operable to select, prior to reception of the content data, a suitable connection method for the content data specified by said browser section ~~from~~ among a plurality of connection methods by using a multi-call function, by extracting the suitable connection method pairing with the file attribute included in the content header received by said communication control section from said connection information management section,

said communication control section is further operable to receive the content data specified by said browser section from the server under the connection method selected by said protocol control section, and

the connection method is either one of a packet switching connection method and a circuit switching connection method.

6. (Cancelled)

7. (Currently Amended) ~~The~~ A content retrieval method for receiving content data from a server via a communication network, according to claim 6, wherein the content data includes locational information of each of sub-content data which is linked to the content data and a connection method which is suitable for each of the sub-content data, said method comprising:

~~said generating of the content retrieval request~~ extracts ~~extracting~~ the locational information and the connection method information of each of the sub-content data by analyzing the received content data, and then ~~generates~~ generating a ~~content~~ retrieval request specifying the locational information of the sub-content data to be retrieved presently; ~~and~~

~~said selecting of the suitable connection method~~ selects ~~selecting,~~ prior to reception of the sub-content data, a suitable connection method for the sub-content data specified in the retrieval request from among a plurality of connection methods by using a multi-call function, based on the connection method information extracted by ~~in said generating of the content retrieval request~~ extracting of the locational information and the connection method information; and

receiving, from the server, the content data specified to be received presently in said generating of the retrieval request under the connection method selected in said selecting of the suitable connection method;

wherein the connection method is either one of a packet switching connection method and a circuit switching connection method.

8. (Currently Amended) ~~The~~ A content retrieval method for retrieving content data from a server via a communication network, according to claim 6, wherein the content data includes locational information and a file attribute of each of sub-content data which is linked to the content data, said method comprising:

managing a connection information table which includes a description of a suitable connection method in association with the file attribute of the content data; is managed in advance,

~~said generating of the content retrieval request~~ extracts ~~extracting~~ a set of the locational information and the file attribute of each of the sub-content data by analyzing the received content data, ~~and holds~~ holding the set as internal information, and then ~~generates~~ generating a ~~content~~ retrieval request specifying the locational information of the sub-content data to be retrieved presently; and

~~said selecting of the suitable connection method selects a suitable connection method from among a plurality of connection methods by,~~ receiving, upon reception of the ~~content~~ retrieval request generated ~~by~~ in said ~~step~~ generating of the ~~content~~ retrieval request, ~~receiving the~~ extracted file attribute pairing with the locational information of the sub-content data specified in the ~~content~~ retrieval request, ~~from said step generating of the content retrieval request,~~ and then ~~extracting~~ selecting, from among a plurality of connection methods by using a multi-call function, the suitable connection method from the connection information table pairing with the extracted file attribute; ~~received from said step generating of the content retrieval request from the connection information table.~~

wherein the connection method is either one of a packet switching connection method and a circuit switching connection method.

9. (Currently Amended) The A content retrieval method for retrieving content data from a server via a communication network, according to claim 6, wherein locational information is allocated to the content data for indicating a storage location of the content data in the server, part of the locational information representing a feature of the content data, said method comprising:

managing a connection information table which includes a description of a suitable connection method in association with the feature of the content data; is managed in advance, and

generating a retrieval request specifying locational information of content data to be retrieved presently;

said selecting of the suitable connection method selects a suitable connection method from among a plurality of connection modes by, receiving, upon reception of the content retrieval request generated by in said generating of the content retrieval request, a extracting the suitable connection method pairing with the part of the locational information included in the content retrieval request from the connection information table, and selecting, prior to reception of the content data, a suitable connection method for the content data specified by the retrieval request from among a plurality of connection methods by using a multi-call function based on the received suitable connection method from the connection information table;-

wherein the connection method is either one of a packet switching connection method and a circuit switching connection method.

10. (Currently Amended) The A content retrieval method for retrieving content data from a server via a communication network, according to claim 6, wherein the server is operable to separately transmit a content header including a file attribute of the content data, in addition to the content data, said method comprising:

managing a connection information table including which includes a description of a suitable connection method in association with the file attribute of the content data; is managed in advance;

wherein said method further comprises:

generating a first retrieval request specifying locational information of the content data to be retrieved presently;

generating, upon reception of the ~~content-first~~ retrieval requested generated ~~by-in~~ said generating of the ~~first content~~-retrieval request, a ~~header-~~ second retrieval request for retrieving only a content header of the content data specified in the ~~content-first~~ retrieval request; and

receiving, ~~from the server,~~ the content header specified in the ~~header-second~~ retrieval request generated ~~by-in~~ said generating of the ~~header-second~~ retrieval request; ~~and from the server;~~ and

~~wherein said selecting of the suitable connection method selects~~ selecting, prior to reception of the content data, a suitable connection method for the content data specified in the first retrieval request from among a plurality of connection methods by using a multi-call function, by extracting the suitable connection method pairing with the file attribute included in the content header received by-in said receiving of the content header from the connection information table;

wherein the connection method is either one of a packet switching connection method and a circuit switching connection method.

11. (Cancelled)

12. (Currently Amended) A program-recorded recording medium on which a program is recorded for retrieving content data from a server via a communication network, according to claim 11, wherein the content data includes locational information of each of sub-content data which is linked to the content data and a connection method which is suitable for each of the sub-content data, said program being operable to perform a method comprising:

~~said generating of the content retrieval request extracts~~ extracting the locational information and the connection method information of each of the sub-content data by analyzing the received content data, and then ~~generates~~ generating a ~~content~~-retrieval request specifying the locational information of the sub-content data to be retrieved presently; ~~and~~

~~said selecting of the suitable connection method selects~~ selecting, prior to reception of the sub-content data, a suitable connection method for the sub-content data specified in the retrieval request from among a plurality of connection methods by using a multi-call function, based on the connection method information extracted by in said generating of the content retrieval request. ~~extracting of the locational information and the connection method information; and~~

receiving, from the server, the content data specified to be received presently in said generating of the retrieval request under the connection method selected in said selecting of the suitable connection method;

wherein the connection method is either one of a packet switching connection method and a circuit switching method.

13. (Currently Amended) A program-recorded recording medium on which a program is recorded for retrieving content data from a server via a communication network, ~~according to claim 11,~~ wherein the content data includes locational information and a file attribute of each of sub-content data which is linked to the content data, said program being operable to perform a method comprising:

managing a connection information table which includes a description of a suitable connection method in association with the file attribute of the content data; ~~is managed in advance,~~

~~said generating of the content retrieval request extract~~ extracting a set of the locational information and the file attribute of each of the sub-content data by analyzing the received content data, ~~and holds~~ holding the set as internal information, and then ~~generates~~ generating a content retrieval request specifying the locational information of the sub-content data to be retrieved presently; and

~~said selecting of the suitable connection method selects a suitable connection method from among a plurality of connection methods by,~~ receiving, upon reception of the content retrieval request generated by in said step generating of the content retrieval request, receiving the extracted file attribute pairing with the locational information specified in the content retrieval request, from said step generating of the content retrieval request, and then extracting selecting, from among a plurality of connections methods by

using a multi-call function, the suitable connection method from the connection information table pairing with the extracted file attribute; received from said step generating of the content retrieval request from the connection information table.

wherein the connection method is either one of a packet switching connection method and a circuit switching connection method.

14. (Currently Amended) A program-recorded recording medium on which a program is recorded for retrieving content data from a server via a communication network, according to claim 11, wherein locational information is allocated to the content data for indicating a storage location of the content data in the server, part of the locational information representing a feature of the content data, said program being operable to perform a method comprising:

managing a connection information table which includes a description of a suitable connection method in association with the feature of the content data; is managed in advance, and

said selecting of the suitable connection method selects a suitable connection method from among a plurality of connection modes by receiving, upon reception of the content retrieval request generated by in said generating of the content retrieval request, a extracting the suitable connection method pairing with the part of the locational information included in the content retrieval request from the connection information table, and selecting prior to reception of the content data, a suitable connection method for the content data specified by the retrieval request from among a plurality of connection methods by using a multi-call function based on the received suitable connection information from the connection information table;-

wherein the connection method is either one of a packet switching connection method and a circuit switching connection method.

15. (Currently Amended) A program-recorded recording medium on which a program is recorded for retrieving content data from a server via a communication network, according to claim 11, wherein the server is operable to separately transmit a

content header including a file attribute of content data, ~~in addition to the content data, said program being operable to perform a method comprising:~~

~~managing a connection information table including which includes a description of a suitable connection method in association with the file attribute of the content data; is managed in advance;~~

~~wherein said method further comprises:~~

~~generating a first retrieval request specifying locational information of the content data to be retrieved presently;~~

~~generating, upon reception of the content-first retrieval requested generated by-in said generating of the content-first retrieval request, a header-second retrieval request for retrieving only a content header of the content data specified in the content-first retrieval request; and~~

~~receiving, from the server, the content header specified in the header-second retrieval request generated by-in said generating of the header-second retrieval request; from the server; and~~

~~wherein said selecting of the suitable connection method selects selecting, prior to reception of the content data, a suitable connection method for the content data specified in the first retrieval request from among a plurality of connection methods by using a multi-call function, by extracting the suitable connection method pairing with the file attribute included in the content header received by-in said receiving of the content header from the connection information table;-~~

~~wherein the connection method is either one of a packet switching connection method and a circuit switching connection method.~~

16. (Cancelled)

17. (Currently Amended) A signal operable to execute a computer to perform a method of retrieving content data from a server via a communication network,
~~A program according to claim 16, wherein the content data includes locational information of each of sub-content data which is linked to the content data and a~~

connection method which is suitable for each of the sub-content data, said method comprising:

~~said generating of the content retrieval request extracts~~extracting the locational information and the connection method information of each of the sub-content data by analyzing the received content data, and then ~~generates~~generating a content-retrieval request specifying the locational information of the sub-content data to be retrieved presently;³⁵ and

~~said selecting of the suitable connection method selects~~selecting, prior to reception of the sub-content data, a suitable connection method for the sub-content data specified in the retrieval request from among a plurality of connection methods by using a multi-call function, based on the connection method information extracted ~~by in~~ said generating of the content retrieval request extracting of the locational information and connection method information;

wherein the connection method is either one of a packet switching connection method and a circuit switching connection method.

18. (Currently Amended) A signal operable to execute a computer to perform a method of retrieving content data from a server via a communication network,
~~A program according to claim 16,~~ wherein the content data includes locational information and a file attribute of each of sub-content data which is linked to the content data, said method comprising:

managing a connection information table which includes a description of a suitable connection method in association with the file attribute of the content data; ~~is managed in advance,~~

~~said generating of the content retrieval request extracts~~extracting a set of the locational information and the file attribute of each of the sub-content data by analyzing the received content data, ~~and holds~~holding the set as internal information, and then ~~generates~~generating a content-retrieval request specifying the locational information of the sub-content data to be retrieved presently;³⁵ and

~~said selecting of the suitable connection method selects a suitable connection method from among a plurality of connection methods by~~receiving, upon reception of

~~the content retrieval request generated by in said step generating of the content retrieval request, receiving the extracted file attribute pairing with the locational information of the sub-content data specified in the content retrieval request, from said step generating of the content retrieval request, and then extracting~~ selecting, from among a plurality of connection methods by using a multi-call function, the suitable connection method from the connection information table pairing with the extracted file attribute; received from said step generating of the content retrieval request from the connection information table.

wherein the connection method is either one of a packet switching connection method and a circuit switching connection method.

19. (Currently Amended) A signal operable to execute a computer to perform a method of retrieving content data from a server via a communication network,
~~A program according to claim 16, wherein locational information is allocated to the content data for indicating a storage location of the content data in the server, part of the locational information representing a feature of the content data, said method comprising:~~
managing a connection information table which includes a description of a suitable connection method in association with the feature of the content data; is managed in advance, and

generating a retrieval request specifying locational information of content data to be retrieved presently;

~~said selecting of the suitable connection method selects a suitable connection method from among a plurality of connection modes by, receiving, upon reception of the content retrieval request generated by in said generating of the content retrieval request, a extracting the suitable connection method pairing with the part of the locational information included in the content retrieval request from the connection information table, and selecting, prior to reception of the content data, a suitable connection method for the content data specified by the retrieval request from among a plurality of connection methods by using a multi-call function based on the received suitable connection method from the connection information table;-~~

wherein the connection method is either one of a packet switching connection method and a circuit switching connection method.

20. (Currently Amended) A signal operable to execute a computer to perform a method of retrieving content data from a server via a communication network,
~~A program according to claim 16,~~ wherein the server is operable to transmit a content header including a file attribute of content data in addition to the content data, said method comprising:

managing a connection information table including which includes a description of a suitable connection method in association with the file attribute of the content data;
~~is managed in advance;~~

~~wherein said method further comprises:~~

generating a first retrieval request specifying locational information of the content data to be retrieved presently;

~~generating, upon reception of the content-first retrieval requested generated by-in~~
said generating of the ~~content-first~~ retrieval request, a header-second retrieval request for retrieving only a content header of the content data specified in the ~~content-first~~ retrieval request; and

receiving, from the server, the content header specified in the header-second
retrieval request generated ~~by-in~~ said generating of the ~~header-second~~ retrieval request;
and from the server; and

~~wherein said selecting of the suitable connection method selects-selecting, prior to~~
reception of the content data, a suitable connection method for the content data specified in the first retrieval request from among a plurality of connection methods by using a multi-call function, by extracting the suitable connection method pairing with the file attribute included in the content header received ~~by-in~~ said receiving of the content header from the connection information table.

wherein the connection method is either one of a packet switching connection method and a circuit switching connection method.